

### **Remarks**

Applicants and the undersigned thank Examiner Mulcahy for carefully reviewing this application. Applicants submit the following remarks in support of the pending claims. Reconsideration of the application in view of the following remarks is respectfully requested.

By the present communication, claim 1 has been amended. Claims 2 – 11 have been maintained in their original or previously presented form. Claim 26 has been cancelled. Claims 12 – 25 were previously withdrawn from consideration. Thus, claims 1 – 25 are currently pending and claims 1 – 11 are under active prosecution.

### **Claim Amendments**

Claim 1 has been amended, without prejudice, to define the applicant's invention with greater specificity. Amendment of claim 1 is supported by the specification and claims as originally filed. No new matter has been added.

### **Rejection Under 35 USC § 112**

Claims 1 – 10, and 26 stand rejected under 35 U.S.C. § 112, first paragraph, as allegedly not being enabled by the specification for all metal species. While Applicants respectfully disagree with the rejection, claim 1 has been amended to advance the prosecution of the this application. Applicants respectfully submit that rejection of claims 1 – 10 is moot in view of the amendment. In view of the cancellation of claim 26, Applicants respectfully submit that rejection of claim 26 is also moot. Reconsideration and withdrawal of the rejection is respectfully requested.

Additionally, claims 1, 4 – 11, and 26 have been rejected under 35 U.S.C. § 112, first paragraph, as allegedly not being enabled for the full scope of “oxidizing agent.” Applicants

respectfully disagree. The specification states that "preferred oxidizing agents are organic peroxides, hydroperoxides as well as oxygen-enriched air." (See paragraphs [0044-0045]). A person skilled in the art, reading the specification, will know that organic or inorganic peroxides are highly effective oxidizing agents, and that even air or oxygen enriched air may function as desired. In view of the cancellation of claim 26, Applicants respectfully submit that rejection of claim 26 is moot. Reconsideration and withdrawal of the rejection is respectfully requested.

**Rejection Under 35 U.S.C. § 102(b) or § 103(a)**

Claims 1, 3 – 6, 8, 11, and 26 have been rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as being obvious over U.S. Pat. No. 3,865,767 (hereinafter "Boberg"). Applicants respectfully disagree and traverse the rejection.

With respect to claim 1, contrary to what is asserted in the Office Action, Boberg does not describe the invention as presently claimed. Boberg is silent with respect to describing a method for preparing an additive for providing controllable degradation of thermoplastics. Instead, Boberg describes a polymer composition that can include an iron degradation compound as an additive. Specifically, Boberg discloses the use of ferric hydroxy stearate ( $\text{FeOH}(\text{stearate})_2$ ). Boberg, however, does not disclose the method of making ferric hydroxy stearate or any other additive. In contrast, claim 1 is directed to a method for preparation of an additive for controlling degradation of thermoplastics of very light colors suitable for processing by film blowing, extrusion, or injection molding.

As noted in the prior response, the method for producing the additive described in claim 1 requires that the reaction between the metal salt and the fatty acid or fatty acid derivative is in the presence of an oxidizing agent, which ensures that the metal is in its highest oxidation state at the

time the additive is prepared. The reliance of the Office Action on Boberg is puzzling as the oxidant described in Boberg is the product of the degradation of the polymer and the polymer is not part of the additive. Further, Boberg includes no disclosure of the metal salt being in its high oxidation state. Thus, the Boberg additive is not in its highest oxidation state as required by claim 1.

Finally, Boberg does not disclose the method of making an additive that includes the production of at least one volatile component as required by claim 1. Accordingly, Boberg does not disclose all of the elements of the present invention.

Claims 3 – 6, 8, and 11 are allowable at least because they depend from an allowable base claim, claim 1, which is allowable for the reasons cited above. In view of the cancellation of claim 26, Applicants respectfully submit that rejection of claim 26 is moot. Withdrawal of the rejection and allowance of the claims are respectfully requested.

Claims 1, 3 – 6, 8, 11, and 26 have been rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by or, in the alternative, under 35 U.S.C. §103(a) as being obvious over U.S. Pat. No. 5,352,716 (hereinafter, "Chapman"). Applicants respectfully disagree and traverse the rejection.

Chapman fails to teach all of the elements of the claims as presented. Chapman teaches a polymeric compound which includes a biodegradable component, a thermoplastic component, and a degradation additive. As with Boberg, Chapman does not disclose the method of making the degradation additive. Thus, Chapman does not teach or suggest the method of reacting a metal salt with a fatty acid in the presence of an oxidizing agent, where the reaction produces at least one volatile component, as required by the claim. Because Chapman fails to teach all of the elements of the claim, claim 1 is neither anticipated by or obvious in view of Chapman.

Claims 3 – 6, 8, and 11 are allowable at least because they depend from an allowable base claim, claim 1, which is allowable for the reasons cited above. In view of the cancellation of claim 26, Applicants respectfully submit that rejection of claim 26 is moot. Withdrawal of the rejection and allowance of the claims are respectfully requested.

Claims 1, 4 – 6, 8, 11, and 26 have been rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as being obvious over U.S. Pat. No. 5,434,277 (hereinafter "Hwu"). Applicants respectfully disagree and traverse the rejection.

With respect to Hwu and the assertion that the claims of the present invention are anticipated by or are obvious over Hwu, Applicants respectfully disagree. Contrary to what the Office Action states, Hwu does not describe the reaction of the metal salt with a fatty acid or fatty acid derivative in the presence of an oxidizing agent. Complete saponification of the stearic acid does not result in the required oxidizing atmosphere. (See Hwu, col. 4, lines 64+). Furthermore, the oxides or hydroxides referenced in col. 1 are the sources of the metal species, and are not themselves oxidizing species, as specified in the present claims. In addition, Hwu fails to describe a reaction which produces at least one volatile reaction component, as specified in the present claims. Finally, Hwu does not disclose the claimed method of preparing an additive for providing controllable degradation of thermoplastics of very light colors that is suitable for processing by film blowing, extrusion, or injection molding. Thus, Hwu does not disclose all of the elements of the present invention, as defined by claim 1.

Claims 4 – 6, 8, and 11 are allowable at least because they depend from an allowable base claim, claim 1, which is allowable for the reasons cited above. In view of the cancellation

of claim 26, Applicants respectfully submit that rejection of claim 26 is moot. Withdrawal of the rejection and allowance of the claims are respectfully requested.

Claims 1, 4 – 6, 8, 11, and 26 have been rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as being obvious over U.S. Pat. No. 5,175,322 (hereinafter, "Yoshizawa"). Applicants respectfully disagree and traverse the rejection.

Yoshizawa does not disclose all of the elements of the claims. Generally, Yoshizawa does not disclose the reaction of a metal salt with a fatty acid or fatty acid derivative in the presence of an oxidizing agent. Yoshizawa instead discloses the reaction of an alkali soap (the alkali metal salt of a fatty acid) with an inorganic metal salt, to create a metallic soap. No oxidizing agent is disclosed. The reaction in Yoshizawa does not result in the production of at least one volatile component. Finally, the Yoshizawa reaction does not result in the claimed additive for providing controllable degradation of thermoplastic of very light colors. Thus, Yoshizawa does not disclose all of the elements of the present invention.

Claims 4 – 6, 8, and 11 are allowable at least because they depend from an allowable base claim, claim 1, which is allowable for the reasons cited above. In view of the cancellation of claim 26, Applicants respectfully submit that rejection of claim 26 is moot. Withdrawal of the rejection and allowance of the claims are respectfully requested.

### **Conclusion**

The foregoing is a full and complete Response to the Non-Final Office Action dated January 31, 2011. Applicant has not acquiesced to any rejection and reserves the right to address

the patentability of any additional claim features in the future. In view of the above, reconsideration and allowance of the claims are respectfully requested.

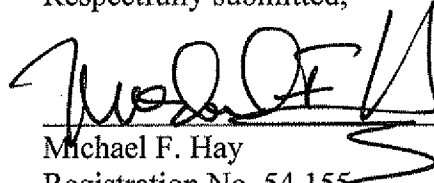
The three-month statutory period for reply expired on April 30, 2011, thus Applicants request a three-month extension of time so that this response is timely filed. Should the Commissioner deem any fees as being due, including fees for extensions of time, the Commissioner is authorized to debit said fees from, or credit overpayments to, Bracewell & Giuliani LLP, USPTO Deposit Account Number 50-0259, Reference No. 061778.002.

The Examiner is requested to contact the undersigned via telephone if a telephone conference would expedite or aid the prosecution and examination of this application.

Date:

July 29, 2011

Respectfully submitted,



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